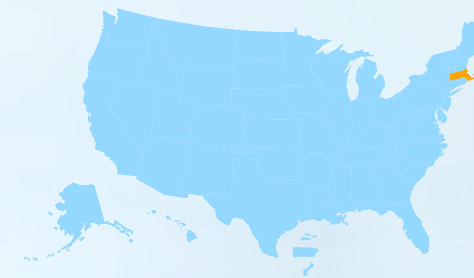




MASSACHUSETTS

Healthcare-associated infections (HAIs) are infections patients can get while receiving medical treatment in a healthcare facility. The **standardized infection ratio (SIR)** is a statistic used to track HAI prevention progress over time; lower SIRs indicate better progress. The infection data are collected through CDC's National Healthcare Safety Network (NHSN). Massachusetts requires hospitals to publicly report at least one HAI to NHSN, and HAI data for nearly all U.S. hospitals are published on the Hospital Compare website.



✓ CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS

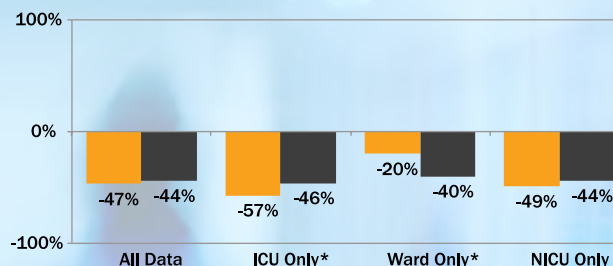
CLABSIs ↓ 47% LOWER COMPARED TO NAT'L BASELINE

A **central line** is a tube that a doctor usually places in a large vein of a patient's neck or chest to give important medical treatment. When not put in correctly or kept clean, central lines can become a freeway for germs to enter the body and cause deadly infections in the blood.

Massachusetts hospitals did not report a significant change in CLABSIs between 2011 and 2012.

7% 7% of Massachusetts hospitals have an SIR worse than the national SIR of 0.56.

Changes in CLABSI vs. 2008 National Baseline



LEGEND

- State
- National
- ✓ State examines data and reviews medical charts for this infection to confirm accuracy and completeness
- Q State investigates data for this infection to assess completeness and quality
- * Statistically significant difference
- v Fewer than 5 facilities reported data

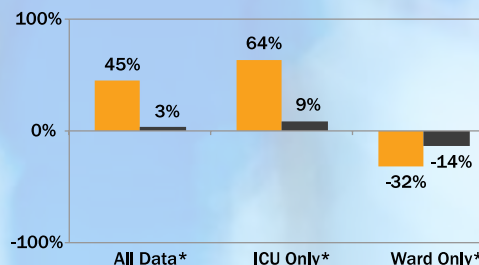
CAUTIs ↑ 45% HIGHER COMPARED TO NAT'L BASELINE

When a urinary catheter is not inserted correctly, not kept clean, or left in a patient for too long, germs can travel through the catheter and cause a **catheter-associated urinary tract infection** in the urinary system, which includes the bladder and kidneys.

15% 15% of Massachusetts hospitals have an SIR worse than the national SIR of 1.03.

CATHETER-ASSOCIATED URINARY TRACT INFECTIONS

Changes in CAUTI vs. 2009 National Baseline



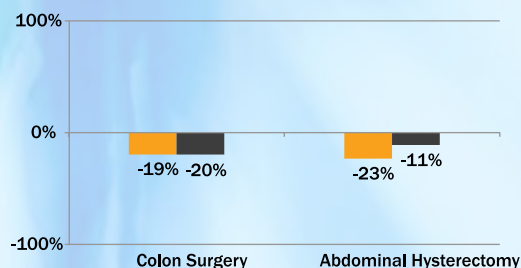
SSIs: COLON SURGERY ↓ 19% LOWER COMPARED TO NAT'L BASELINE

SURGICAL SITE INFECTIONS: COLON SURGERY AND ABDOMINAL HYSTERECTOMY SURGERY

When germs get into an area where surgery is or was performed, patients can get a **surgical site infection**. Sometimes these infections involve the skin only. Other SSIs can involve tissues under the skin, organs, or implanted material.

10% 10% of Massachusetts hospitals have a colon surgery SIR worse than the national SIR of 0.80.

Changes in SSI vs. 2008 National Baseline



SSIs: ABDOMINAL HYSTERECTOMY ↓ 23% LOWER COMPARED TO NAT'L BASELINE

8% 8% of Massachusetts hospitals have an abdominal hysterectomy SIR worse than the national SIR of 0.89.





MASSACHUSETTS

Learn how your hospital is preventing infections: www.medicare.gov/hospitalcompare
For more information:

- 2012 HAI Progress Report: www.cdc.gov/hai/progress-report/
- Preventing HAIs: www.cdc.gov/hai
- NHSN: www.cdc.gov/nhsn
- HAIs in Massachusetts:
www.mass.gov/eohhs/gov/departments/dph/programs/hcq/healthcare-quality/health-care-facilities/hospitals/



HEALTHCARE-ASSOCIATED INFECTION (HAI) DATA gives healthcare facilities and public health agencies knowledge to design, implement, and evaluate HAI prevention efforts.

WHAT IS THE STANDARDIZED INFECTION RATIO?

The **standardized infection ratio (SIR)** is a statistic used to track healthcare-associated infection prevention progress over time. The SIR for a facility or state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics.



Q In some cases, states that work to validate, or double check, HAI data may have higher SIRs since they are actively looking for infections.

WHAT DOES THE STANDARDIZED INFECTION RATIO MEAN?

IF THE STATE SIR IS:

**MORE
THAN 1**

There were more infections reported in the state in 2012 compared to the national baseline data, **indicating there has been an increase in infections.**

1

There were about the same number of infections reported in the state in 2012 compared to the national baseline data, **indicating no progress has been made.**

**LESS
THAN 1**

There were fewer infections reported in the state in 2012 compared to the national baseline data, **indicating progress has been made in preventing infections.**

WHAT IS MASSACHUSETTS DOING TO PREVENT HEALTHCARE-ASSOCIATED INFECTIONS?

Massachusetts has a state mandate to publicly report at least one HAI to NHSN.

Massachusetts has several prevention efforts (known as prevention collaboratives) to reduce specific HAIs, including:

- Central line-associated bloodstream infections
- Surgical site infections
- *Clostridium difficile*, deadly diarrheal infections
- Ventilator-associated pneumonia infections

Massachusetts implemented prevention efforts in long-term care facilities and dialysis facilities, and to improve antibiotic stewardship.

⁺ Not all hospitals are required to report these infections; some hospitals do not use central lines or urinary catheters, or do not perform colon or abdominal hysterectomy surgeries.

NUMBER OF MASSACHUSETTS HOSPITALS THAT REPORTED DATA TO CDC'S NHSN IN 2012

Total Hospitals: 95⁺

CLABSI
67 hospitals

Massachusetts' 2012 state **CLABSI** SIR is similar to the 2012 national SIR.

STATE SIR

0.53

NAT'L SIR

0.56

CAUTI
66 hospitals

Massachusetts' 2012 state **CAUTI** SIR is significantly worse than the 2012 national SIR.

1.45

1.03

SSI, Colon Surgery
62 hospitals

Massachusetts' 2012 state **Colon Surgery SSI** SIR is similar to the 2012 national SIR.

0.81

0.80

SSI, Abdominal Hysterectomy
61 hospitals

Massachusetts' 2012 state **Abdominal Hysterectomy SSI** SIR is similar to the 2012 national SIR.

0.77

0.89